PE CO

control number.

PTO/SB/08A (08-03) Approved for use through 07/31/2006. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. ĎEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB

十

Complete if Known Substitute for form 1449A/PTO **Application Number** 10/613,963 INFORMATION DISCLOSURE **Filing Date** July_3, 2003 STATEMENT BY APPLICANT First Named Inventor Sartaj Kumar Sahni (use as many sheets as necessary) **Art Unit Examiner Name** SAI MING of **Attorney Docket Number** Sheet UF-318X 3

	U.S. PATENT DOCUMENTS							
Examiner Initials*	Cite No. 1	Document Number Number - Kind Code ^x (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear			
/SC/	U1	US 4,251, 861	02-17-1981	Mago	_			
/SC/	U2	US 4,833, 468	05-23-1989	Larson et al.				
/SC/	U3	US 5,555,405	09-10-1996	Griesmer et al.				
/SC/	U4	US 5,701,467	12-23-1997	Freeston				
/SC/	U5	US 5,787,430	07-28-1998	Doeringer et al.				
/SC/	U6	US 5,909,440	06-01-1999	Ferguson et al.				
/SC/	U7	US 6,018, 524	01-25-2000	Turner et al.				
/SC/	U8	US 6,021,131	02-01-2000	Even				
/SC/	U9	US 6,041,053	03-21-2000	Douceur et al.				
/SC/	U10	US 6,061,712	05-09-2000	Tzeng				
/SC/	U11	US 6,092,072	07-18-2000	Guha et al.	•			
/SC/	U12	US 6,157,955	12-05-2000	Narad <i>et al</i> .				
/SC/	U13	US 6,212,184	04-03-2001	Venkatachary et al.				
ISCL	U14	US 6,289,013	09-11-2001	Lakshman et al.				
išči	U15	US 6,335,932	01-01-2002	Kadambi <i>et al</i> .				
ISC/	U16	US 6,341,130	01-22-2002	Lakshman <i>et al.</i>				

FOREIGN PATENT DOCUMENTS								
		Foreign Patent Document	Dublication Date	Name of Bothston on	Pages, Columns, Lines,			
Examiner Initials*	Cite No. 1	Country Code 3 - Number 4 - Kind Code 3 (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Where Relevant Passages or Relevant Figures Appear	T4		
1501	F1							
ISCI	F2							

Examiner	/Sai Ming Chan/	Date	03/15/2007
Signature	/Sai Ming Chan/	Considered	00/10/2007

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. Applicant's unique citation designation number (optional). See Kind Codes of USPTO Patent Documents at www.uspto.gov or MPEP901.04. Interest of the Indication of the year of the reign of the Emperor must precede the serial number of the patent document. Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

PTO/SB/08B (08-03)
Approved for use through 07/31/2006. OMB 0851-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB

				Con	nplete if Known	
	e for form 1449B/PTC		OCUDE	Application Number	10/613,963	
	RMATION D		•	Filing Date	July 3, 2003	
STAT	STATEMENT BY APPLICANT			First Named Inventor	Sartaj Kumar Sahni	
(use as many sheets as necessary)			occon/)	Group Art Unit	2681 2609	
			essary)	Examiner Name	SAI MING CHAN	
Sheet	2	of	3	Attorney Docket Number	UF-318X	

		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials*	Cite No. 1	Include name of the author (in CAPITAL LETTERS), title of the article, (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T²
/SC/	R1	DEGERMARK, MIKAEL, et al. (1997) "Small Forwarding Tables for Fast Routing Lookups" ACM SIGCOMM Proceedings of the ACM SIGCOMM '97 conference on Applications, technologies, architectures, and protocols for computer communication. pages 3-14.	
/SC/	R2	DOERINGER, W., G. KARJOTH, and M. NASSEHI (1996) "Routing on longest-matching prefixes" IEEE/ACM Transactions on Networking, 4(1): pages 86-87.	
/SC/	R3	ERGUN, FUNDA, et al. (2001) "A Dynamic Lookup Scheme for Bursty Access Patterns" Proceedings of IEEE INFOCOM pages 1-10.	
/SC/	R4	GUPTA, P. and N. MCKEOWN (2000) "Dynamic algorithms with worst-case performance for packet classification" <i>IFIP Networking</i> pages 528-539.	
/SC/	R5	LAMPSON, BUTLER, VENKATACHARY SRINIVASAN, and GEORGE VARGHESE (June 1999) "IP Lookups Using Multiway and Multicolumn Search" IEEE/ACM Transactions on Networking Vol. 7, No. 3, pages 324-334	
/SC/	R6	LU, H. and SAHNI, S. (2003) "O (log n) dynamic router-tables for prefixes and ranges" IEEE Symposium on Computers and Communications, pages 1-42	
/SC/	R7	NILSSON, STEFAN and GUNNAR KARLSSON (1998) "Fast address lookup for Internet routers" <i>Proceedings of IEEE Broadband Communications</i> (enclosed copy pages numbered 9-18).	
/SC/	R8	RUIZ-SANCHEZ, M., E. BIERSACK, and W. DABBOUS (Mar/Apr 2001) "Survey and taxonomy of IP address lookup algorithms" <i>IEEE Network</i> , 15(2): pages 8-23.	
/SC/	R9	SAHNI, SARTAJ and KUN SUK KIM "Data Structures of IP Lookup with Bursty Access Patterns" www.cise.ufl.edu/~sahni (enclosed copy pages numbered 1-5)	
/SC/	R10	SAHNI, SARTAJ and KUN SUK KIM (2001) "Efficient Construction of Fixed-Stride Multibit Tries for IP Lookup" Proceedings of 8th IEEE Workshop on Future Trends of Distributed Computing Systems pages 178-184 (enclosed copy pages numbed 1-7).	

Examiner	/Sai Ming Chan/	Date	03/15/2007
Signature		Considered	00/10/2007

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Applicant's unique citation designation number (optional). Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO).

This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to USPTO. Time will vary depending upon the Individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

PTO/SB/08B (08-03)

Approved for use through 07/31/2008. OMB 0851-0031U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

(08-03) MERCE

				Cor	mplete if Known
	e for form 1449B/PTO RMATION D		ASLIDE	Application Number	10/613,963
				Filing Date	July 3, 2003
SIAI	EMENT BY	AP	LICANI	First Named Inventor	Sartaj Kumar Sahni
(us	se as many sheets	ac nor	(vnessæ	Group Art Unit	26 61 2609
· · · · · · · · · · · · · · · · · · ·				Examiner Name	SAI MING CHAN
Sheet	3	of	3	Attorney Docket Number	UF-318X

NON PATENT LITERATURE DOCUMENTS						
Examiner Initials*	Cite No. 1	Include name of the author (in CAPITAL LETTERS), title of the article, (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.				
/SC/	R11	SAHNI, SARTAJ and KUN SUK KIM (2002) "Efficient Construction of Variable-Stride Multibit Tries for IP Lookup" Proceedings of IEEE Symposium on Applications and the Internet (SAINT) pages 220-229 (enclosed copy pages numbered 1-8).				
/SC/	R12	SAHNI, SARTAJ and KUN SUK KIM (July 2002) "O(log n) Dynamic Packet Routing" 7th IEEE Symposium on Computers and Communications. Pages 1-29				
/SC/	R13	SAHNI, SARTAJ, KUN SUK KIM, and HAIBIN LU (May 2002) "Data Structures for One-Dimensional Packet Classification Using Most-Specific-Rule Matching" International Symposium on Parallel Architectures, Algorithms, and Networks (ISPAN) pages 3-14 (enclosed copy pages numbered 1-12).				
/SC/	R14	SKLOWER, KEITH (1991) *A Tree-Based Packet Routing Table for Berkeley Unix* Proceedings of 1991 Winter USENIX Conference pages 93-99 (enclosed copy pages numbered 1-4).				
/SC/	R15	SRINIVASAN, V. and G. VARGHESE (Feb. 1999) "Faster IP Lookups Using Controlled Prefix Expansion" ACM Transactions on Computer Systems Vol.17, issue 1, pages 1-40 (enclosed copy pages numbered 1-21).				
/SC/	R16	SURI, S., G. VARGHESE, and P. WARKHEDE (2001) "Multiway range trees: Scalable IP lookup with fast updates" <i>Proceedings of Globecom '01</i> .				
/SC/	R17	WALDVOGEL, MARCEL et al. (1997) "Scalable High Speed IP Routing Lookups" Proceedings of the ACM SIGCOMM '97 Conference on Applications, technologies, architectures, and protocols for computer communication. pages 25-36 (enclosed copy pages numbered 1-12).				
/SC/	R18					
/SC/	R19	·				
/SC/	R20					
/SC/	R21					
/SC/	R22					

	<u>ئور دور دور دور دور دور دور دور دور دور د</u>		
Examiner	/Sai Ming Chan/	Date	03/15/2007
Signature	, ,	Considered	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. Applicant's unique citation designation number (optional). Applicant is to place a check mark here if English language Translation is attached. his collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450. If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.



PTO/SB/08A (08-03)

Approved for use through 07/31/2008. OMB 0651-0031 U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form	Substitute for form 1449A/PTO			Complete if Known		
	-			Application Number	10/613,963	
	ATION DISC			Filing Date	July 3, 2003	
STATEMENT BY APPLICANT				First Named Inventor	Sahni	
	ise as many sheel	te ae neceesai	n/ì	Art Unit	268T 2609	
		10 00 110000001	"	Examiner Name	SAI MING CHAN	
Sheet	1	of	1	Attorney Docket Number	UF-318X	

	U.S. PATENT DOCUMENTS								
Examiner Initials*	Cite No. 1	Document Number Number - Kind Code ² (if	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant				
•	NO.	known)	. WINF-DO-TTTT	of Cited Document	Figures Appear				
/SC/	U1	US-6,533,370 B1	04-22-03	Andreev et al.	All				
/SC/	U2	US 6,675,157 B1	01-06-04	Mitchell	All ·				
	U3								
	U4		i						
	U5	. :							
	U6								
	U7	·							
	U8								

Examiner	/Sai Ming Chan/	l Date	03/15/2007
Cionatura	/Our willing Orland	C:	03/13/2007
Signature		Considered	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. Applicant's unique citation designation number (optional). See Kind Codes of USPTO Patent Documents at www.uspto.gov or MPEP901.04. Enter Office that issued the document, by the two-letter code (WiPO Standard T.3). For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. Skind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.